

NEW JERSEY STATEWIDE SURVEILLANCE

Week 38 Report for 18 September to 24 September, 2006

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Purpose: Data from 84 New Jersey light traps contributed by county mosquito control agencies are used to calculate trends in mosquito populations for species of nuisance or health concerns.

Calculations are based on regional distributions, with emphasis on mosquito habitat and land use. Trends will allow a statewide evaluation of changing mosquito populations, in response to control and/or changes in habitat.

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Figure 1a: Map of ten regions selected for the New Jersey Surveillance Program overlaid with county borders.

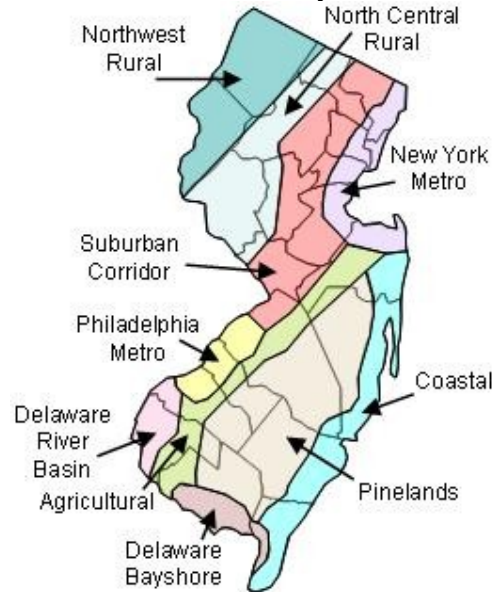


Figure 1b. Trap lat-long locations.



Summary table – Week 38

	<i>Aedes vexans</i>		<i>Culex Mix</i>		<i>Coquillettidia perturbans</i>		<i>Ochlerotatus sollicitans</i>	
Region	This Week	Average*	This Week	Average*	This Week	Average*	This Week	Average*
Agricultural	2.31	3.08	0.14	8.92	0.00	0.00	0.00	0.22
Coastal	4.22	0.79	0.90	2.33	0.00	0.03	0.78	18.63
Delaware Bayshore	0.00	0.06	0.00	6.17	0.00	0.02	0.00	2.83
Delaware River Basin	0.00	6.40	0.00	16.89	0.00	0.10	0.00	0.04
New York Metro	0.67	1.13	1.14	3.58	0.00	0.00	0.00	0.51
North Central Rural	0.76	0.35	0.41	0.48	0.00	0.00	0.00	0.00
Northwest Rural	0.29	12.16	0.02	2.68	0.00	0.05	0.00	0.00
Philadelphia Metro	17.37	9.59	1.45	2.47	0.00	0.10	0.00	0.00
Pinelands	1.16	1.22	1.48	1.78	0.01	0.07	0.01	0.37
Suburban Corridor	13.01	2.43	0.82	2.06	0.00	0.13	0.00	0.02

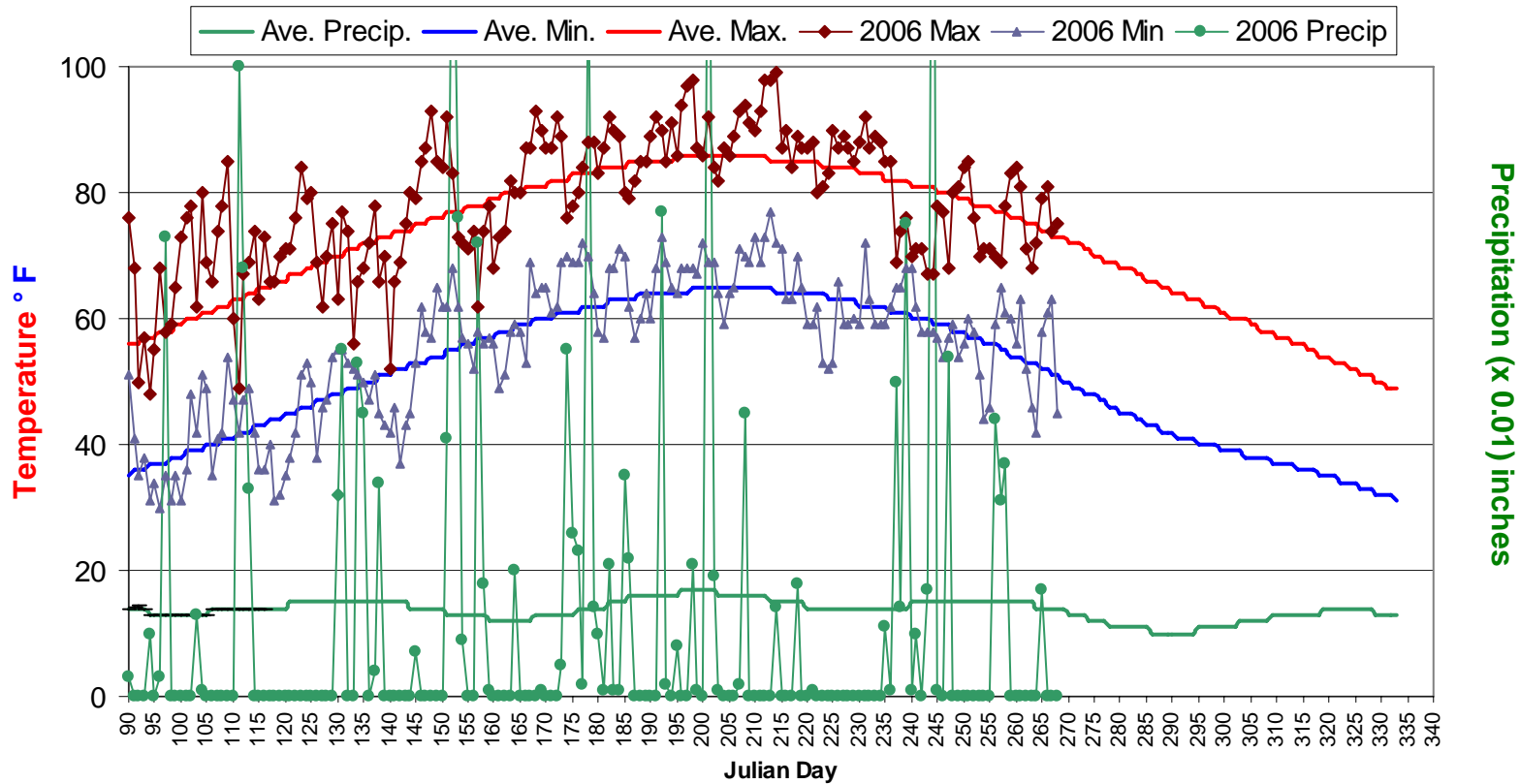
* 5-year running mean.

Graphs include *Ae. vexans*, *Culex* complex (*Cx. pipiens*, *Cx. restuans*, and *Cx. salinarius*), *Oc. sollicitans*, *Cs. melanura* and *Top Ten*.

8 of 21 counties in current week; 20 of 21 counties reporting.

Climate Data

New Brunswick 1971-2000 Historical/Hillsborough 2006

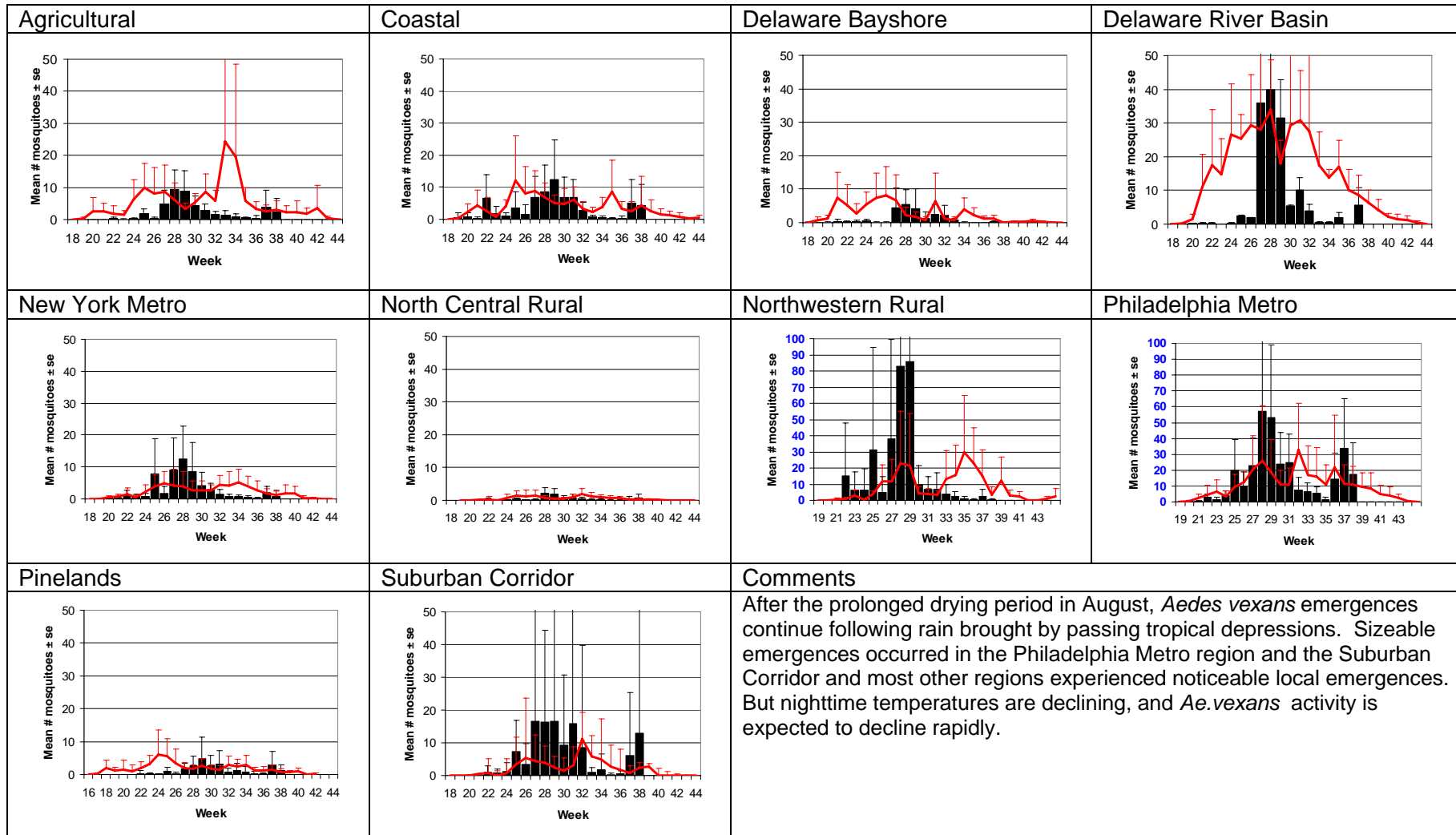


This figure shows historical average maximum and minimum temperatures and average precipitation recorded in the New Brunswick, NJ weather station over a recent 30 year period. Also graphed are the current year's minimum and maximum temperatures as recorded at the Hillsborough NJ weather station (a station close to central NJ which recorded all three parameters and was available online at the NJ state climatologist).

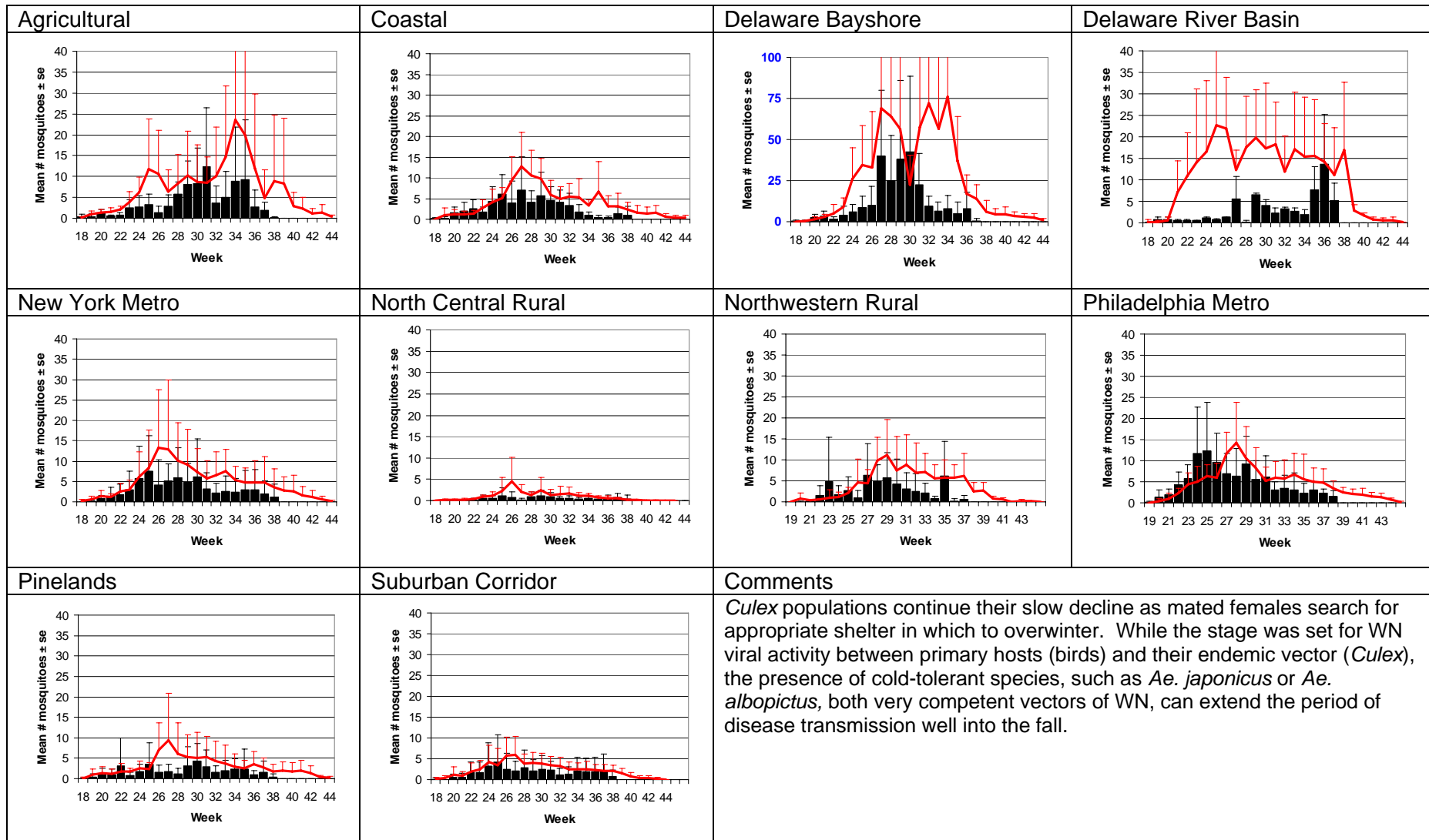
The state climatologist has an extensive amount of climatological historical data as well as stations reporting current conditions and forecasts:

<http://climate.rutgers.edu/stateclim/>

Aedes vexans - Fresh Floodwater Species



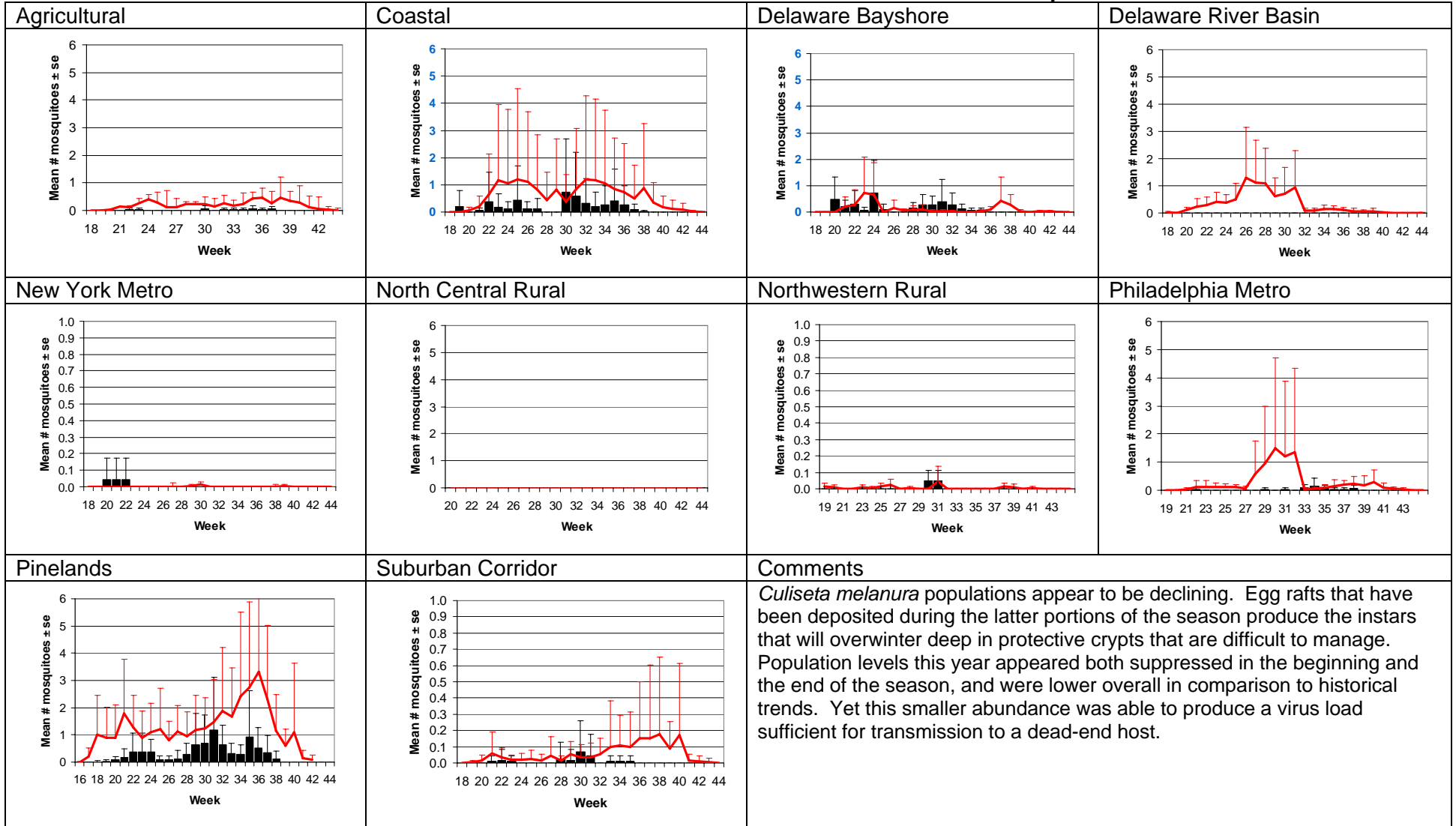
Culex Complex - Multivoltine Culex Species



Ochlerotatus sollicitans - Salt Marsh Floodwater Species

Agricultural	Coastal	Delaware Bayshore	Delaware River Basin
New York Metro	North Central Rural	Northwestern Rural	Philadelphia Metro
Pinelands	Suburban Corridor	Comments	
		<p><i>Ochlerotatus sollicitans</i> presence in light traps has continued to decrease. The seasonal pattern seen in the Coastal region, although lower than what was typically seen in the last five years, suggests that there were 4 emergences.</p>	

Culiseta melanura – Miscellaneous Group



Top Ten cumulative species for each region to date.

